- Exhibit F -

	S DISTRICT COURT DISTRICT OF CALIFORNIA
	D DIVISION
ABANTE ROOTER AND PLUMBING, INC., MARK HANKINS, and PHILIP J. CHARVAT, individually and on behalf of all others similarly situated, Plaintiffs, V.	NO. 4:15-cv-06314-YGR SUPPLEMENTAL EXPERT REPORT OF ANYA VERKHOVSKAYA JURY TRIAL DEMAND Complaint Filed: December 30, 2015
ALARM.COM INCORPORATED, and ALARM.COM HOLDINGS, INC., Defendants.	Honorable Yvonne Gonzalez Rogers

SUPPLEMENTAL EXPERT REPORT OF ANYA VERKHOVSKAYA - 1 CASE No. 4:15-cv-06314-YGR

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I, Anya Verkhovskaya, hereby certify as follows:

I. INTRODUCTION AND SUMMARY OF OPINIONS

- 1. Plaintiffs' Counsel asked me to analyze call records produced in the above-captioned litigation (the "Action"). I understand that, inter alia, Plaintiffs allege that Defendants violated the Telephone Consumer Protection Act ("TCPA"), 47 U.S.C. § 227 et seq., by initiating, or others initiating on its behalf, telephone solicitations to persons whose telephone numbers were listed on the NDNCR. Plaintiffs' counsel asked me to identify the telephone numbers that (1) received two or more calls within a 12-month period, as based on call log information, (2) were on the NDNCR at least 31 days prior to the first call, and (3) were not identified as business or government telephone numbers.
- 2. All of the work accomplished in connection with this Supplement Expert Report was performed at my direction and with my supervision.
- 3. In my opinion, Defendants, or others acting on behalf of Defendants, made 3,002,373 calls to 393,762 unique residential telephone numbers after those telephone numbers were listed on the NDNCR for at least 31 days and calls were placed to each number at least twice within a twelve-month period.
- 4. In my opinion, names and addresses associated with these numbers and the users/subscribers to these numbers can be ascertained through reliable databases.
- 5. In my opinion, Defendants made calls to Plaintiff Charvat's residential telephone number after his telephone number had been listed on the NDNCR for at least 31 days and calls were placed to his number at least twice within a twelve-month period.

II. EXPERIENCE AND QUALIFICATIONS

6. I am the Managing Director of DRRT. With offices in Miami, Paris, London and Frankfurt, DRRT works with institutional investors in the United States and around the world in all aspects of global securities litigation, loss recovery and securities claims filing. In addition, DRRT offers litigation support services with focus on data management and data analysis. The

matters stated herein are based upon my personal knowledge or matters known or reasonably available to me.

- 7. I have regularly overseen and directed the analysis of call records and other data sets in my professional experience. A copy of my resume is attached to this report as Exhibit A.
 - 8. Plaintiffs have retained me at an hourly rate of \$525 an hour.
- 9. In cases brought under the Telephone Consumer Protection Act ("TCPA"),
 47 U.S.C. § 227, I routinely analyze call records to identify class members. As part of this
 analysis, I partner with established and reputable data vendors, such as LexisNexis, Experian,
 Nexxa Group, Inc. ("Nexxa"), Microbilt Corporation, TransUnion, and others (collectively,
 "Data Processors"). I have long-standing relationships and prior experience with the Data
 Processors. The Data Processors are able to provide information via access to numerous records
 and sources. For example: (i) Nexxa provides information from the National Do Not Call
 Registry ("NDNCR"), including date of registry, (ii) Experian provides skip-tracing services to
 identify the most recent address of an individual based on a combination of name, address
 history, and/or telephone number;\(^1\) (iii) LexisNexis provides information from public and
 proprietary records, including information regarding whether a particular telephone number was
 associated with a business or residence and telephone number;\(^2\) and (iv) TransUnion provides
 user/subscriber information that identifies the person associated with a particular telephone
 number as of the date of the call.
- 10. I regularly use these Data Processors in coordinating data analysis prior to class certification and in administering class action settlements, a context in which maximum accuracy and reliability are critical. In my experience, gained over the course of several years of working

¹ According to Experian, at www.experian.com/consumer-information/skip-tracing-services.com, MetroNet provides access to comprehensive contact data on more than 140 million households and 19 million businesses with multiple data sources updated regularly to ensure the most accurate, up-to-date information available.

² It is common knowledge within the class action administration industry that LexisNexis is one of the largest aggregators of public records and proprietary information. Their information comes from governmental sources, leading credit bureaus, national address databases, national phone databases, utility information, warranty and subscription information, and thousands of other sources.

1	with the Data Processors, they provide accurate and reliable information and are regularly called	
2	upon to provide this type of information in court-supervised class action settlements, and is	
3	information routinely and reasonably relied upon by experts in the field to distinguish business	
4	telephone numbers from residential telephones.	
5	11. I provided data analysis utilizing Data Processors' services in TCPA cases that	
6	include, but are not limited to those listed on the attached Exhibit B.	
7	12. I have testified in as an expert witness at deposition or trial in the last four years	
8	in the cases listed on the attached Exhibit C.	
9	III. ANALYSIS	
10	A. Source Data Files	
11	13. The below listed data files were provided by Plaintiffs' Counsel. I understand	
12	these files represent calls placed by, or on behalf of, Defendants (the "Source Data").	
13	Data received in 2016: Alliance Security Data: a) Fonality.zip (contains	
14	ALLIANCE 000023 through ALLIANCE 000075.csv) – 53 files; b) RingCentral.zip (contains	
15		
16	RINGCENTRAL_000001.csv) – 1 file; and c): TimeWarner.zip (contains	
17	ALLIANCE_000076.csv) – 1 file. Nationwide Data: a) Nationwide.zip (contains	
18	NATIONWIDE_000012 through NATIONWIDE_000019.xlsx) – 8 files.	
19	4444AAGE 0000 22	
20	• ALLIANCE_000023.csv • ALLIANCE_000055.csv	
21	• ALLIANCE_000024.csv • ALLIANCE_000056.csv	
22	• ALLIANCE_000025.csv • ALLIANCE_000057.csv	
23	• ALLIANCE_000026.csv • ALLIANCE_000058.csv	
24	• ALLIANCE 000027.csv • ALLIANCE 000059.csv	
25	• ALLIANCE_000028.csv • ALLIANCE_000060.csv	
26	- ALDIANCE_000020.csv	
27		

1	• ALLIANCE_000029.csv	• ALLIANCE_000061.csv
2	• ALLIANCE_000030.csv	• ALLIANCE_000062.csv
3	• ALLIANCE_000031.csv	• ALLIANCE_000063.csv
4	• ALLIANCE_000032.csv	• ALLIANCE_000064.csv
5	• ALLIANCE_000033.csv	• ALLIANCE_000065.csv
6 7	• ALLIANCE_000034.csv	ALLIANCE_000066.csv
8	• ALLIANCE_000035.csv	• ALLIANCE_000067.csv
9	• ALLIANCE_000036.csv	• ALLIANCE_000068.csv
10	• ALLIANCE_000037.csv	• ALLIANCE_000069.csv
11	• ALLIANCE_000038.csv	ALLIANCE_000070.csv
12	 ALLIANCE_000039.csv 	ALLIANCE_000071.csv
13	- • ALLIANCE_000040.csv	ALLIANCE_000072.csv
14 15	- • ALLIANCE_000041.csv	 ALLIANCE_000073.csv
16	• ALLIANCE_000042.csv	• ALLIANCE_000074.csv
17	• ALLIANCE_000043.csv	 ALLIANCE_000075.csv
18	-	
19	ALLIANCE_000044.csv	• ALLIANCE_000076.csv
20	• ALLIANCE_000045.csv	• RINGCENTRAL_000001.csv
21	• ALLIANCE_000046.csv	• NATIONWIDE_000012.xlsx
22	• ALLIANCE_000047.csv	• NATIONWIDE_000013.xlsx
23	• ALLIANCE_000048.csv	• NATIONWIDE_000014.xlsx
24	• ALLIANCE_000049.csv	• NATIONWIDE_000015.xlsx
25		TATTOTA NEEL-VOOTOLAIDA
26	ALLIANCE_000050.csv	• NATIONWIDE_000016.xlsx
	II	

1	ALLIANCE_000051.csv	• NATIONWIDE_000017.xlsx
2	ALLIANCE_000052.csv	• NATIONWIDE_000018.xlsx
3	• ALLIANCE_000053.csv	• NATIONWIDE_000019.xlsx
4	• ALLIANCE_000054.csv	
5	Alliance Call Data received in 2017	(18 files):
6	• VMS1511157.CSV	
7	• VMS1511155.CSV	
9	• VMS1511156.CSV	
10	• VMS1511150.CS V	
11		
12	• VMS1511154.CSV	
13	• VMS1511150.CSV	
14	• VMS1511143.CSV	
15	• VMS1511142.CSV	
16	• VMS1508023.XLSX	
17	• VMS1511137.CSV	
18	• VMS1511141.CSV	
19 20	• VMS1511138.CSV	
21	• VMS1511140.CSV	
22	• VMS1511139.CSV	
23	• VMS1511136.CSV	
24	• VMS1504649.CSV	
25		
26	• VMS1505540.CSV	
27	• VMS0721655.CSV	

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1	Alliance FTC Call Data Received in 2017 (62 files)
2	• VMS1515706.CSV
3	• VMS1515698.CSV
4	• VMS1515697.CSV
5	• VMS1515692.CSV
6	• VMS1515696.CSV
7	• VMS1515693.CSV
8 9	• VMS1515695.CSV
10	 VMS1515898.CSV through VMS1515942.CSV
11	
12	14. To perform the analysis, the Source Data, including all relevant data points, was
13	loaded into a sequel database from which further data analysis could occur, queries could be run,
14	and additional data points tracked.
15	B. Preliminary Qualifying Call Analysis
16	15. The parameters for the initial analysis are as follows. Identify records within the
17	database to:
18	a Exclude any inbound calls;
19	b Exclude any calls with a duration of "0" and where there was not an
20	indication of a connection;
2122	c Exclude any records that do not contain a full 10-digit telephone number;
23	d Exclude all calls placed before December 30, 2011;
24	e Exclude any calls if placed to a telephone number with an invalid area
25	code; ³
26	
27	³ I removed records with area codes less than 201 or greater than 989.
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- f Exclude calls placed to telephone numbers from the CLS records, which I understand represent records Defendant states show consent;
- g Exclude records that are duplicate records (applying conservative criteria of telephone number, date and time, truncated down to minutes to identify duplicates); and
- h Exclude records that did not receive two or more calls within any 12-month period.

Results from steps 12a to 12f produced a list of Qualifying Calls Numbers.⁴ Attached hereto as Exhibit D is an overview of the fields and field mapping utilized in the qualifying call analysis.

C. National Do Not Call Registry Analysis

- 16. The Qualifying Calls Numbers were reviewed to identify telephone numbers that received more than one Qualifying Call within any 12-month period, at a time when that telephone number had been listed on the NDNCR for at least 31 days prior to the first Qualifying Call.⁵
- 17. First, the Qualifying Calls Numbers were analyzed to determine which telephone numbers were listed on the NDNCR and, for those records, the date each telephone number was added to the NDNCR. This analysis was performed together with Nexxa. I understand that Nexxa obtains information regarding the NDNCR, including date of registry, from the Federal Trade Commission ("FTC"). I have an Organization ID number issued by the FTC that Nexxa uses to access information available from the NDNCR. Based on my experience, Nexxa provides accurate and reliable NDNCR registration information, and I regularly rely on its analysis.

⁴ I removed records with area codes for toll-free numbers (800, 844, 855, 866, 877 and 888) as a later step.

⁵ This and any subsequent references to 31-day timeframes designate inclusive timeframes, meaning, for example, that a telephone number was on a list or registry for at least 31 full days prior to a subsequent call (so that the call would have occurred on day 32).

- 18. At my direction, Nexxa was advised that two files would be forwarded for NDNCR analysis.
- 19. A file listing the 1,868,997 Qualifying Calls Numbers was prepared and uploaded to the Nexxa file transfer site (the "FTP").
- 20. Nexxa performed its analysis and produced an output file (the "Output"), received via FTP, that included whether each telephone number had been listed on the NDNCR and, if applicable, the date the telephone number was added to the NDNCR. Attached hereto as Exhibit E is a spreadsheet containing the Output.
- 21. The Output was then reviewed to identify all Qualifying Call Numbers that were listed on the NDNCR as of 31 days prior to the date the first Qualifying Call made to that telephone number (the "NDNCR Numbers") and that there was at least one or more Qualifying Call(s) after the first NDNCR-eligible Qualifying Call.
- 22. A total of 402,166 NDNCR Numbers were identified. Attached hereto as Exhibit F is a spreadsheet containing the NDNCR Numbers.

D. Business Analysis

23. The NDNCR Numbers were reviewed to identify any that were identified as business or government telephone numbers during the relevant timeframe. I understand that LexisNexis has access to information from public and proprietary records, including information regarding whether a particular telephone number was associated with a business, government or residence. At my direction, LexisNexis analyzed the NDNCR Numbers to determine which telephone numbers were identified as business or government numbers during the relevant timeframe. LexisNexis provided information for each telephone number based on the dates of Qualifying Calls to determine if the call was a business or government number at that time. It is

common knowledge within the class action administration industry that LexisNexis is one of the largest aggregators of public data. Based on my experience in this industry, LexisNexis provides accurate and reliable information and I regularly rely on its analysis to administer class action settlements, and is information routinely and reasonably relied upon by experts in the field to distinguish business telephone numbers from residential telephones.

- 24. The NDNCR Numbers were submitted to LexisNexis to identify which NDNCR Numbers were associated with businesses or government.
 - 25. The outputs received from LexisNexis were then reviewed.
- 26. A total of 8,404 NDNCR Numbers were identified and removed as either business or government telephone numbers and/or toll-free telephone numbers and 393,762 NDNCR Numbers were identified as residential (the "Residential NDNCR Numbers"). Attached hereto as Exhibit G is a spreadsheet listing the Residential NDNCR Numbers.
- 27. The Residential NDNCR Numbers were then compared to the Qualifying Calls to identify the total number of calls made to them after they had been on the NDNCR for at least 31 days prior. A total of 3,002,373 Qualifying Calls were made to the Residential NDNCR Numbers after they had been on the NDNCR for at least 31 days prior.

E. Plaintiff Charvat

28. I understand that Plaintiff Philip J. Charvat's telephone number is 614-895-8940. Plaintiff Charvat's telephone number appears in the Residential NDNCR Numbers. This means that at least two calls in a twelve-month period were placed to Plaintiff Charvat's telephone number 614-895-8940 after the number had been on the NDNCR for at least 31 days.

F. User/Subscriber Information

- 29. I can identify names and addresses associated with telephone numbers called by, or on behalf of, Defendants. Specifically, I can identify the user(s)/subscriber(s) of a given telephone number and the address of the user(s)/subscriber(s) for that given telephone number at the time of a specific call.
- 30. I would use information from reputable data vendors, such as TransUnion, LexisNexis, Experian, Microbilt, Nexxa Group, Inc., and others. I have long worked with these companies and used their database information to identify class members in settlements and for litigation purposes.
- 31. To obtain such user(s)/subscriber(s) information, I would provide the relevant telephone numbers to the above-identified data vendors. The data vendors would access their databases of public and proprietary information to produce an output including the name and address of the user(s)/subscriber(s) of those telephone numbers at the time the calls were placed.
- 32. I would also coordinate to update any addresses through the United States Postal Service ("USPS") National Change of Address ("NCOA^{Link}") database, which contains approximately 160 million records or 48 months of permanent address changes. NCOA^{Link} is updated daily and USPS regularly provides change-of-address information to NCOA^{Link} licensees. NCOA^{Link} helps reduce undeliverable-as-addressed ("UAA") mail by correcting input addresses prior to mailing. Additional address updating via Experian's MetroNet® service would be coordinated for any addresses determined to be undeliverable. Further, I could coordinate with additional data vendors, such as Experian, to identify addresses based upon name and telephone number information for further supplementation of addresses or other information that has not yet been identified.

33. I regularly use these processes are to identify class members in class actions, as do other administration firms. In my experience, these processes are reliable, are reasonably relied upon by experts in the field, and are approved by courts charged with oversight of class actions, class notice, and settlement administration.

IV. SUMMARY

- 34. In summary, my opinion is that Defendants, or others acting on behalf of Defendants, made 3,002,373 calls to 393,762 unique residential telephone numbers after those telephone numbers were listed on the NDNCR for at least 31 days and calls were placed to each number at least twice within a twelve-month period.
- 35. In my opinion, names and addresses associated with these numbers and the users/subscribers to these numbers can be ascertained through reliable databases.
- 36. In my opinion, Defendants made calls to Plaintiff Charvat's residential telephone number after his telephone number had been listed on the NDNCR for at least 31 days and calls were placed to his number at least twice within a twelve-month period.
- 37. I have reached the opinions expressed herein based on a reasonable degree of certainty in the fields of data management, data analysis, class member identification, and claims administration

Executed at Milwaukee, Wisconsin, this January 5, 2018.

Anya Verkhovskaya